WHAT IS CLAIMED IS:

1.   A belt-type fixing device comprising a nip forming member that is fixed inside an endless-sheet-like fixing belt to be heated so as to be incapable of rotating, and a rotatable pressurizing roller that is in pressure contact with the nip forming member with the fixing belt interposed between, wherein contact part between the fixing belt and the pressurizing roller forms a fixing nip, and a surface of the nip forming member that is opposite to the pressurizing roller is configured as a curved surface extending along an outer circumferential surface of the pressurizing roller so that a pressure distribution in the fixing nip is made generally flat with respect to a paper feeding direction.

2.   A belt-type fixing device as claimed in claim 1, wherein the pressurizing roller has an elastic layer on an outer circumference thereof and the nip forming member comprises material that is harder than the elastic layer.

3.   A belt-type fixing device as claimed in claim 2, wherein the nip forming member causes a radial strain not less than 0.3 mm in the elastic layer of the pressurizing roller with a mean pressure not less than 80 kPa.

4.   A belt-type fixing device as claimed in claim 1, further comprising a heat source for heating the fixing belt, in a position away from the fixing nip, wherein a thermal conductivity of the elastic layer of the pressurizing roller is 0.3 W/(m·K) or less.

5.   A belt-type fixing device as claimed in claim 1, wherein a thickness of the elastic layer of the pressurizing roller is not less than 4 mm.

6.   A belt-type fixing device as claimed in claim 1, wherein a radius r1 of curvature of the curved surface and a radius r2 of curvature of the pressurizing roller are set so that a relation of a following expression 1 holds:

$$r2 \leq r1 \leq r2 \cdot K \qquad \text{(expression 1)}$$
$$\text{(wherein } 1 \leq K < 1.13)$$

7.   A belt-type fixing device as claimed in claim 1, wherein a mean radius r1 of curvature of the curved surface and a radius r2 of curvature of the pressurizing roller are set so that a relation of a following expression 2 holds:

$$r2 \leq r1 \leq r2 \cdot K \qquad \text{(expression 2)}$$
$$\text{(wherein } 1 \leq K \leq 1.3)$$

8.   A belt-type fixing device as claimed in claim 6, wherein the pressurizing roller has an elastic layer on an outer circumference thereof and the elastic layer has a

5   JIS-A hardness in a range from 5 to 40.

9.   A belt-type fixing device as claimed in claim 6, wherein a mean pressure in the fixing nip is not less than 50 kPa and not more than 250 kPa.

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10.   A belt-type fixing device as claimed in claim 6, wherein the fixing belt is wound around a rotatable heating roller having a heat source and around the nip forming member provided in a position away from the heating roller.

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11.   A belt-type fixing device for fixing a toner image on a paper, the belt-type fixing device comprising:

        an endless-sheet-like belt member,

        a pressurizing roller which has an elasticity and

20   on which the paper is passed through a fixing nip that is contact part between the pressurizing roller and an outer circumferential surface of the belt member, and

        a nip forming member that is harder than the pressurizing roller, that is positioned inside the belt

25   member, that relatively presses the belt member against the

pressurizing roller, and that has a pressing surface opposite to the pressurizing roller and formed of a curved surface extending along an outer circumferential surface of the pressurizing roller.

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12.   A belt-type fixing device as claimed in claim 11, wherein a radius of curvature of the pressing surface of the nip forming member is substantially equal to a radius of curvature of the outer circumferential surface of the

10   pressurizing roller.

13.   A belt-type fixing device as claimed in claim 11, wherein a radius r1 of curvature of the pressing surface of the nip forming member and a radius r2 of curvature of the

15   outer circumferential surface of the pressurizing roller are set so that a relation of a following expression 3 holds:

$$r2 \leq r1 \leq r2 \cdot K \qquad \text{(expression 3)}$$

20      $$(\text{wherein } 1 \leq K < 1.13)$$

14.   A belt-type fixing device as claimed in claim 11, wherein the pressing surface of the nip forming member is formed of one and same material continuously.

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15.   A belt-type fixing device as claimed in claim 11, wherein the pressurizing roller is driven to rotate, and the belt member follows the pressurizing roller and thereby rotates.